

DISCUSSION OF THE AMENDMENT

Claims 1, 5-6, 8-15 and 19-20 are active in the present application. Claims 2-4, 7, and 16-18 are canceled claims. Independent Claim 1 is amended to include the limitations of previously pending Claims 2, 3 and 4.

No new matter is added.

REMARKS

Present independent Claim 1 is drawn to an electrostatic developer that includes an uncrosslinked, linear hydrocarbon based homopolymer wax ("the wax"). The wax of Claim 1 has the particular molecular weight, branching, degree of crystallinity and DSC characteristics defined in the claim.

The Office rejected the claims as obvious over Tanikawa (U.S. 5,364,722). The Office asserts that it would have been obvious to use the wax of Tanikawa in the presently claimed invention because the waxes are similar in DSC properties and branching. Applicants submit that the electrostatic developer of present Claim 1 is not obvious over the prior art relied on by the Office.

Applicants submit that Tanikawa does not suggest an electrostatic developer containing the particular wax recited in present Claim 1. For example, the number average molecular weight (Mn) must be between 700 and 790 in the wax of the presently claimed electrostatic developer. In addition, the wax must also have a polydispersity (Mw/Mn) value in the range of from 1.1 to 1.3. Tanikawa discloses the properties of the prior art waxes in a series of tables provided in column 20 of the reference. Tanikawa discloses only two waxes (i.e., wax A1 and wax I1 in Table 2 of column 20) that fall within the 700-790 Mn range recited in present Claim 1. However, for each of wax A1 and wax I1 the Mw/Mn value is substantially larger than that of the range recited in present Claim 1 (i.e., 1.65 and 4.17, respectively). Likewise, the tables of prior art waxes in columns 26 and 31 of Tanikawa do not disclose any wax meeting the Mn and Mw/Mn properties required by the wax of the present claims.

Present Claim 1 also requires that the DSC of the wax of the claimed electrostatic developer have a primary endotherm at a temperature of from 70-90°C. Applicants submit

that a hydrocarbon having a combination of properties including the Mn, Mw/Mn and primary endotherm properties of the wax of the present claims is not suggested by Tanikawa.

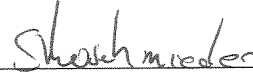
For example, Tanikawa discloses a series of inventive waxes in Tables 1 and 13. The inventive waxes of Table 1 are identified as A1, B1, C1, D1, and E1 and the inventive waxes of Table 13 are identified as A3, B3, C3, D3, and E3. The inventive waxes of Tables 1 and 13 of Tanikawa have absorption peak temperatures that are greater than 100°C. In contrast, the comparative examples of Tables 1 and 13 of Tanikawa have absorption peak temperatures of about 100°C or less than 100°C. The performance of toners that include the waxes of Tanikawa are described in Tables 5-6 and 17-19. Of particular interest are Tables 6 and 18 which provide an easily recognizable comparison of the performance properties of the comparative and inventive toners of Tanikawa. These tables provide an easy visual recognition that the properties of the comparative toners, i.e., those toners containing waxes having absorption peak temperatures substantially lower than the absorption peak temperatures of the inventive examples, provide poor performance in areas such as anti-blocking, image density, and fog.

Applicants submit that Tanikawa teaches away from using waxes having low absorption peak temperatures. This is evident from the fact that those toners and compositions containing hydrocarbon waxes having low absorption peak temperatures provide poor performance when used in toners. Applicants submit that one of ordinary skill in the art reading the above-described disclosure of Tanikawa would conclude that hydrocarbon waxes having relatively low absorption peak temperatures will not provide good performance. Hence, Tanikawa teaches away from compositions that include hydrocarbon waxes having a primary endotherm of from 70-90°C (e.g., lower than the minimum 100°C absorption peak temperature for the inventive examples of Tanikawa).

In view of Tanikawa's teaching away from the presently claimed invention,
Applicants submit that the presently pending claims should be allowed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



J. Derek Mason
Attorney of Record
Registration No. 35,270

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)
JDM:SUK\la

Stefan U. Koschmieder, Ph.D.
Registration No. 50,238